

Training Oregon Volunteers to Develop Meaningful Monitoring Plans

Beth Lambert

Oregon State University Extension Service, 2204 4th Street, Tillamook, OR 97141

Biographical Sketch of Author

Beth Lambert is a watershed management extension agent with the Oregon State University Extension Service. She works with landowners, agencies, non-profits, teachers, and the general public to encourage stream habitat and water quality restoration. Beth specializes in riparian restoration, water quality monitoring, and capacity-building for community-based watershed councils. She works in Tillamook and Clatsop Counties on Oregon's north coast and teaches statewide workshops as well.

Abstract

Water quality monitoring is a popular activity for Oregon's community-based watershed councils. Much training is available to these volunteers to help them learn to use monitoring equipment and collect accurate measurements. But, little training has been available to help them develop strong monitoring plans that lead to the collection of useful data.

To train volunteers to develop meaningful monitoring plans, Oregon State University Extension Service developed a monitoring curriculum for its Watershed Stewardship Education Program (WSEP). WSEP is a series of workshops offered around the state that provides information about watershed processes, and stream ecology to watershed council members, landowners, and others. WSEP participants attend 40 hours of training, and may choose to complete a 40-hour volunteer project and receive Master Watershed Steward certification. At least 300 people have completed WSEP since its start in 1998. A survey of Master Watershed Stewards revealed that 30 % intended to become involved in water quality monitoring.

WSEP's water quality monitoring curriculum consists of a two-hour presentation / discussion and a three-hour hands-on session that helps volunteers learn to develop monitoring plans and interpret water quality data. During the lecture / discussion, participants are introduced to baseline, trend, and effectiveness monitoring. Participants examine graphed data sets and discuss when and where data should be collected in order to better achieve monitoring goals. During the hands-on session, participants work in small groups to develop monitoring plans for one of Oregon's watersheds. Participants are given maps of the topography, land use, and land ownership along with some initial water quality data. A worksheet leads the participants through the process of identifying water quality concerns; developing monitoring goals, objectives, specific questions or hypotheses; and developing a monitoring plan to meet their objectives. Each group then shares its monitoring plans with the larger group.